

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested.

Currently, claims 1-15 are pending in this application.

Request for Interview:

Applicant has attached hereto an Interview Request Form. Applicant would greatly appreciate the opportunity to discuss the present application with the Examiner.

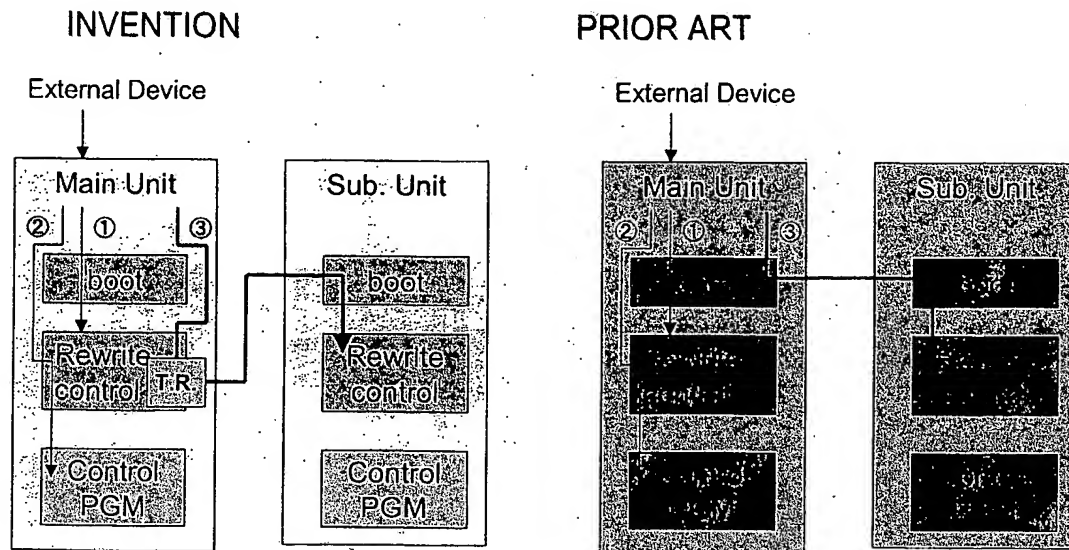
Rejection Under 35 U.S.C. §103:

Claims 1-3 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Okanoue (U.S. '640). Applicant respectfully traverses this rejection.

In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. The combination of AAPA and Okanoue fails to teach or suggest all of the claim limitations. For example, the combination fails to teach or suggest a first rewrite program being retrieved into and executed by a first electronic unit, the first rewrite program including a transfer routine for transferring a second rewrite program to a second electronic unit, as required by independent claim 1 and its dependents.

In order to facilitate a greater understanding of the invention, the following figure contrasts the present invention with a known prior art technique.

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T.R. stands for Transfer Routine in 1st rewrite program. 2nd Rewrite Program through 1st boot program, 2nd Rewrite Program not through 1st boot program, but through transfer routine in 1st rewrite program

As will be appreciated from the above figure and from the language required by claim 1, a transfer routine (T.R.), which is included in a retrieved first rewrite program dedicated to the first electronic unit ("Main Unit" in the above Fig.), is used for retrieving a second rewrite program dedicated to the second electronic unit ("Sub. Unit" in the above Fig.). A boot program of the Main Unit is therefore not needed when retrieving the second rewrite program. (See step (3) in above Fig.) These features are supported by, for example, steps/arrows 51-54 in Fig. 5 of the present application. As explicitly required by claim 1, "the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit."

A main boot program can thus be designed as an all-purpose program due to the presence of the transfer routine included in the rewrite program dedicated to the first

electronic unit. As described on page 10, lines 14-20 of the present specification (as editorially amended):

“This structure eliminates the need of the modification of the boot program, being applied to various conditions or applications. For instance, a boot program of each microcomputer thereby need not be modified so that a flash memory storing the boot program of the microcomputer can be replaced with a mask ROM or the like. This also enables the boot program to be simplified.”

The combination of AAPA and Okanou fails to teach or suggest the above-noted limitation. Col. 3, lines 26-59 (specifically identified by the Office Action) of Okanou states the following:

“In FIGS. 2(A) and 2(B), respective operations of the gateway device 102 and each CPU unit are illustrated. Referring to FIG. 2(A), the CID 101 transmits a control message and a download file (new firmware) to the gateway device 102. The control message includes information of the total data amount of the download file. Upon reception of the first data (step S1), the gateway device 102 stores that data into the temporary memory 103 (step S2), and transfers the same data and the control message to the CPU unit 1 (step S3). In the similar manner, steps S1-S3 are repeated until all the data of the download file are correctly transferred to CPU unit 1.

Referring to FIG. 2(B), upon reception of the control message and the first data from the gateway device 102 (step S4), the CPU unit 1 stores that data into the backup memory BM1 (step S5), and transfers the control message and the same data to the next target unit, i.e., the CPU unit 2 (step S6). By recognizing the total data amount of the download file from the control message, the CPU unit 1 repeats the operations of storing data received from the gateway device 102 into the backup memory BM1 and transferring the same data until transferring all the data correctly to the CPU unit 2. Performing the similar operations, the CPU unit 2 transfers all the data of the download file to the CPU unit 3. The remaining CPU units perform the similar operations repeatedly and, as a result, the new firmware file is stored into the backup memory BM_i of each CPU unit.

When the new firmware has been stored into every CPU unit, the backup memory BM_i and the active memory AM_i are switched in each CPU unit in response to a user's instruction or by automatic control as described later, and an operation based on the new firmware is started with securing the old firmware.”

While the above passage of Okanoué discloses data transfer from CPU unit 1 to CPU unit 2, Okanoué fails to provide any detailed description of the transfer method or procedure. Accordingly, Okanoué may use the known procedure described in the figure above in which a main boot program in CPU unit 1 is used for downloading a rewrite program in CPU unit 1 and also rewrite programs for other secondary CPU units 2, 3, etc. In no case does Okanoué specifically describe a transfer routine, that is included in the rewrite program retrieved into the first electronic unit, being used for retrieving rewrite programs of other electronic units. Accordingly, the combination of AAPA and Okanoué fails to teach or suggest all of the limitations required by claim 1 and its dependents.

Accordingly, Applicant respectfully submits that the rejection of claims 1-3 under 35 U.S.C. §103 be withdrawn.

New Claims:

New claims 4-15 have been added to provide additional protection for the invention. New independent claims 4 and 7 requires, *inter alia*, “wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit.” Similar comments apply to independent claims 10, 12 and 14. Applicant thus submits that these claims are allowable.

KONDO

Application No. 10/775,130

November 14, 2006

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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By: _____



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Abstract

A processing system includes microcomputers A, B. A rewrite program for the microcomputer A includes a transfer routine for transferring a rewrite program for the microcomputer B. When a program rewrite unit outputs the rewrite program for the microcomputer B, the microcomputer A executes the transfer routine to transfer the rewrite program for the microcomputer B. A boot program of each microcomputer thereby need not be modified even when a flash memory storing the boot program of the microcomputer B is replaced with a mask ROM or the like. This enables the processing system to flexibly meet various applications.